Climate Resilient Islands Programme

Case Study: from resilience vision to actions: Banikea

The Climate Resilient Islands approach rests on interlinked activities where communities identify their resilience vision and picture as part of their Community Resilience Profile and then make plans for resilience activity pathways related to that vision. This case study is part of a series that identifies threads of interconnection throughout the process in each community, as part of documenting the value of the process and sharing stories with other partners. Each case study shows how the community resilience vision and picture guides learning from the resilience profile to identify the most important resilience actions.

Community context

In the inland community of Banikea, Fiji, there are many natural resources, such as abundant fruit trees, but agriculture has been declining due to degraded soils and loss of local forest to pine plantations. The river is an important local source of resources, but it has been affected by local loss of soil quality and increased erosion due to more intense flooding.

Community Resilience Picture and Vision

The community wants to maintain Indigenous knowledge, the clan system, religion and the tradition of working together to help everyone in the village. Resilience will come through managing time, increasing agriculture, restoring ecosystems, having good homes, roads and education, and being prepared for disasters.

The community's resilience picture is of the local fish Rediogobius (dome or goby), which is endangered and requires pristine waters in the river for its survival.

The fish is only found in the Banikea river and is connected to the resilience vision of restoring the river ecosystem to ensure the protection of the fish.

Three most important indicators:

The community chose the following three most important indicators to guide their resilience pathway choices. All three relate to the example pathway of restoring the river system. The community acknowledges that restoration work must involve joint efforts as there needs to be restoration of the whole river system. Restoring the river system, and in particular strengthening riverside vegetation, will prevent flooding that has adversely affected riverside gardens. The community also acknowledges their close connections with the land, which is integrated with the river system, providing services for their wellbeing. This connection is partially explained by the concept of *vanua*.

- Knowledge – solesolevaki
- Physical security – Disaster preparedness
- Connections – Vanua

Resilience strategy: Riverbank rehabilitation

From the activities conducted during the community profiling, the community have continuously linked their discussions and plans to the importance of the river system. For the community, the river is a source of their livelihood through ensuring food security (farms are located near rivers), their uprooted kava plants (main source of income) are washed in the river before being dried, the community fish the river, they water their livestock there, gardens are near the river and the villagers recreationally bath in the river.

The community are currently working with key stakeholders from the Ministry of Forestry and the Ministry of Agriculture to ensure that the river system is protected through interventions that are proven to be successful in other parts of Fiji.

The Ministry of Agriculture under their waterways department have been greatly supportive in providing technical experts in the riverbank rehabilitation activities by providing advice on suitable trees and plants to aid in the successful rehabilitation of the riverbank.

The community is planting vetiver and native trees to stabilise riverbanks. There is also work being done on reforestation, to further stabilise the river system and the wider ecosystem.

Through the project, the community are hopeful of restoring the health of the river system which will in turn ensure continuous support for their livelihoods and also secure their village from flooding.

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The project activities also take into consideration the involvement of youths and women. They are the most active groups in the community. They have been involved in planting of vetiver and native trees and also the reforestation works where the women and youths have been working with the Live & Learn CRI team in the clearing and weeding phases.

Connected strategies: climate-smart farming and forest restoration

The community value of 'solesolevaki', or working together, is strengthened by the pathway. This pathway is connected to the farming for livelihood pathway whereby the community members have learnt about organic farming practices and sustainable land management. This will greatly assist them in shifting away from unsustainable farming practices which threatens their land and river ecosystems. Sustainable farming practices will stabilise soil and minimise runoff into the river, as well as provide for better resilience through diversification.

The Ministry of Forestry has an initiative known as the Reforestation of Degraded Forest (RDF) which assists land-owning units reforest degraded lands while being paid to do so. This is the approach taken up by the CRI Fiji Team in Banikea village. The Ministry of Forestry have been very supportive in providing technical expertise in ensuring the success of the reforestation activity. Reforestation includes planting native species in degraded forest areas.

Absorb, Adapt, Transform framework

The CRI programme operates on the understanding that community resilience can be conceptualized as a three-level structure, incorporating the community's ability to absorb, adapt, or transform. Absorption utilizes community skills and structures to bounce back after negative events. Adaptation requires adjustments to a community's ways of living, sometimes with external help. Transformation almost always requires varying levels of external help to significantly change societal structures and habits in order to remain resilient.

The community established the following strengths and capacities for the pathway involving river restoration:

- Absorb strengths – fish from rivers, diverse foods, community has substantial land for cultivation of various food produce and kava, community has control over the river and surrounding forest to enable plantings
- Adapt strengths – improved natural resource management, REDD+ scheme, community has the capacity to plant riverbank stabilising plants, especially youths and women are active in the community.
- Transform strengths – Livelihood diversification, the community are now looking at planting seasonal vegetables and resilience crops closer to the village because of threats posed from wild pigs destroying farms.

Strategy Pathways	ACTION 1	ACTION 2	ACTION 3	ACTION 4
Riverbank rehabilitation	Analysis of river, housing, flooding risks *Who: Community members*	Training on river ecosystem management and formulation of river management plan *Who: Community members*	Grant assistance: Seek grants for riverbank rehabilitation *Who: Community members*	Implement riverbank rehabilitation plans *Who: Community members*

Planning pathways are aligned with three outcome areas: nature-based solutions (NbS), food security and disaster risk reduction (DRR). These are at the core of the programme and align to grant seeking activities.

Additionally, communities plan to incorporate traditional knowledge into pathways.

Nature-based Solutions: In Banikea, the restoration of the riverbank is being conducted with the use of native and introduced species in order to mitigate flooding. This is also connected to forest restoration. Both of these aspects will contribute to the ecosystem's ability to soak up floodwaters, removing the need for other flood reduction strategies such as concrete walls and overflow dams.

Food security will be increased by the restoration of the river and forest contributing to the increasing diversity of foods available, as will he reduction of flood threats to riverside gardens.

Overall, forest and riverbank restoration will contribute to disaster risk reduction by reducing flooding risks.

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